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Lattice QCD Thermodynamics : 10k analysis with 1k thermalization and block size of 500.

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May 11, 2007

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This work was performed under the auspices of the U.S. Department of Energy by University of California, Lawrence Livermore National Laboratory under Contract W-7405-Eng-48.

This is a re-analysis of the Lattice QCD Thermodynamics p4rhcm new beta analysis (UCRL-TR-230742) with approximately 10k trajectories per beta point, rerun with thermalization cut at 1000, and a block size of 500. Some diagnostic text has been omitted to reduce the number of pages.

2: 0:

23: 871:p4b3.46 500 1000

24: 3180:hmc 4670 2.45283774673176 1.03046560507222 0.515231769354496

25:11151:pbp 9340 3.13000000000000001e-02 0.155491409006484

0.000169180903283242 1.1390935739145e-06 1.41166996063358e-07

3.1300000000000000e-03 0.0735387706722108 0.00016456590238368

2.22321301115481e-06 2.85886049245516e-07

26: 4876:plaq 4670 0.52400881678347 2.61277790596294e-05

8.91488053100797e-08 3.81930521293361e-09

27: 4851:rect 4670 0.283906625410957 3.68842352022443e-05

1.53131558705902e-07 7.8436319547222e-09

28: 5090:wline 18680 0.0042389031712064 0.000373503777384484

8.98856078577633e-05 1.37531844183538e-06

30: 0:

51: 874:p4b3.49 500 1000

52: 3140:hmc 6040 1.90227214031502 1.05571851390603 0.556561062837302

53:11428:pbp 12080 2.8999999999999998e-03 0.053722145716519

0.000475863200830582 4.48098610547076e-06 6.73388873361514e-07

2.90000000000000001e-02 0.132085725903561 0.000266352655639449

1.64515179612326e-06 2.11978892978513e-07

54: 4931:plaq 6040 0.530934596563854 3.30124899818082e-05

9.31639292075817e-08 4.48628111158368e-09

55: 4868:rect 6040 0.292454121840373 4.92215983290253e-05

1.6558379051487e-07 9.15193870643597e-09

56: 5080:wline 24160 0.00715269555756498 0.00043482777043216

8.80595627005891e-05 2.44792006606718e-06

58: 0:

79: 867:p4b3.51 500 1000

80: 3193:hmc 7540 1.62321972502847 1.00167869530439 0.579082262669268

81:11623:pbp 15080 2.5899999999999999e-02 0.113150185883609

0.000178378103929727 1.37142568009932e-06 2.55288492541975e-07

2.5899999999999999e-03 0.0402848764573978 0.000270379838460212

4.17391518535229e-06 7.09128746085528e-07

82: 4927:plaq 7540 0.535348059419254 2.37438835331623e-05

8.69515484336336e-08 5.57432850385552e-09

83: 4892:rect 7540 0.297936105092403 3.55641783453312e-05

1.56386049235402e-07 1.10798780213731e-08

84: 5077:wline 30160 0.0116733413909369 0.000344779406621999

9.14504483087204e-05 1.96556634527149e-06

86: 0:

112: 870:p4b3.54 500 1000

113: 3196:hmc 7560 1.28458907987241 1.00957912701947 0.617023812355794
114:11432:pbp 15120 2.3999999999999998e-03 0.0216137555598192
0.00044198869861771 5.60234882721417e-06 9.42487130454081e-07
2.4000000000000000e-02 0.0933028201968946 0.000243127665966922
1.6086647397468e-06 2.75545561734228e-07
115: 4912:plaq 7560 0.541521751212931 2.09789904013925e-05
8.22189398310056e-08 3.93466319219509e-09
116: 4913:rect 7560 0.305628385607352 3.24392394467314e-05
1.50708535259582e-07 8.22315911468435e-09
117: 4952:wline 30240 0.0227532109501736 0.000564296104832225
9.646806829313e-05 2.52322199970975e-06
119: 0:
140: 873:p4b3.57 500 1000
141: 3181:hmc 8130 1.07451190679677 1.02418015752316 0.647331514884993
142:11491:pbp 16260 2.1199999999999999e-03 0.0107410693561506
0.000164499114066519 1.25222923796482e-06 2.21153090762132e-07
2.1200000000000000e-02 0.0740991365504289 0.000166475379110593
9.89787107017435e-07 1.84240487576349e-07
143: 4920:plaq 8130 0.547274056197232 1.29325929381668e-05
7.73449323402768e-08 3.39350262474641e-09
144: 4902:rect 8130 0.312802842188354 2.00392026701004e-05
1.41358288076783e-07 6.67798365660671e-09
145: 4971:wline 32520 0.034241572541054 0.000579606220858939
0.000105880573647368 3.06679152897084e-06
147: 0:
168: 867:p4b3.60 500 1000
169: 3248:hmc 9950 0.960064845829127 1.00734439329216 0.657370510928489
170:11724:pbp 19900 1.9199999999999998e-02 0.0614208169995593
8.72553530557246e-05 4.68420168617897e-07 5.10385316188635e-08
1.9200000000000000e-03 0.00713222992996333 4.75496622786022e-05
1.90305648413569e-07 2.92455885935737e-08
171: 4864:plaq 9950 0.552509226699081 1.32170756037788e-05
7.0114034522728e-08 2.36334938861317e-09
172: 4914:rect 9950 0.319302570272181 2.05465132468743e-05
1.27789551883207e-07 4.61563893272109e-09
173: 5033:wline 39800 0.0427649323836654 0.000349988781732514
0.000104338219167614 2.53447887410756e-06
175: 0:
196: 870:p4b3.63 500 1000
197: 3221:hmc 9880 0.906581612802185 1.03008404032863 0.668041712590089
198:11720:pbp 19760 1.6999999999999999e-03 0.00540239828099285
3.30499275580762e-05 7.27932584705452e-08 1.82031852275639e-08
1.7000000000000000e-02 0.0504519471757693 9.49280107551099e-05
3.78290477134799e-07 4.09454946731031e-08
199: 4955:plaq 9880 0.557518849827334 1.16528418407644e-05
6.83782391418407e-08 2.06473692956396e-09

200: 4892:rect 9880 0.325533316916545 1.85003833022645e-05
1.27653208085073e-07 5.11902660545275e-09
201: 4989:wline 39520 0.0514423233040692 0.000480484284040027
0.000112516872853568 3.23794055371465e-06
203: 0:
234: 873:p4b3.66 500 1000
235: 3186:hmc 9300 0.84772881713437 1.00758547267024 0.672041644909637
236:11733:pbp 18600 1.6999999999999999e-03 0.00492460692974527
1.40678636323891e-05 2.35908726890493e-08 3.68068459422296e-09
1.70000000000000001e-02 0.0473704805566056 5.07394764914931e-05
1.96319979846948e-07 2.19480522508801e-08
237: 4972:plaq 9300 0.562283396818168 9.99880548680192e-06
6.79983878681303e-08 2.62977234391743e-09
238: 4851:rect 9300 0.331458730643226 1.46432854541865e-05
1.31684807657096e-07 5.6604901766002e-09
239: 5005:wline 37200 0.0592151435782168 0.000494323212493129
0.000107781380931717 3.09718620186793e-06
241: 0:
267: 876:p4b3.69 500 1000
268: 3204:hmc 9880 0.808932984313519 1.01381496676284 0.67782492512162
269:11601:pbp 19760 1.5000000000000000e-03 0.00404426758893293
6.5838314613579e-06 7.20582067938749e-09 1.47991895149131e-09
1.4999999999999999e-02 0.0397201029400636 3.24453373045416e-05
1.00706871225588e-07 7.3716394993719e-09
270: 4716:plaq 9880 0.56691021853589 8.79565915162011e-06
6.25406015401323e-08 2.32478582779e-09
271: 4841:rect 9880 0.33725078637864 1.3501551576485e-05
1.18141833916865e-07 4.40974697693571e-09
272: 5014:wline 39520 0.0673285738174577 0.000477955129702763
0.000111954170136002 2.09777479011254e-06
274: 0:
295: 874:p4b3.76 500 1000
296: 3263:hmc 9890 0.752031998276668 1.01647820394179 0.691557074215972
297:11606:pbp 19780 1.3899999999999999e-02 0.0335773663939723
1.8012615806768e-05 3.03460809170493e-08 2.98839912033218e-09
1.3900000000000000e-03 0.00338170601732411 3.19852700847079e-06
1.26110179225353e-09 2.84633039877431e-10
298: 4933:plaq 9890 0.577113285052347 8.39330231781097e-06
5.92363477097063e-08 1.17270508537599e-09
299: 4896:rect 9890 0.350083229348164 1.49602106285563e-05
1.16943137621864e-07 2.62413026193543e-09
300: 5043:wline 39560 0.0851072112349518 0.000440417052429778
0.000117696974327975 2.80928083996278e-06